

Shuf 24/05

Work Order ID 100119

April-18-13 9:27:16 AM

ASAP

100119

Page 1

Item ID: 646.3715

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Strut Doubler

Start Date: 4/18/13

Start Qty: 12.00

12/9
12

Required Date: 4/25/13

Req'd Qty: 12.00

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: ML5

Date: 13-04-18 Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								

646.3700	A	0.00							
----------	---	------	--	--	--	--	--	--	--

110

0.00

110

Waterjet

Memo

0.00

9 0 JM13-4-19

FLOW CNC Waterjet
6061-040

1-Cut as per Dwg

Dwg Rev: A

Prog Rev: A

2-Deburr if necessary

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120

QC

Memo

0.00

9 0 JM13-4-19

Quality Control

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <hr/> <hr/> <hr/>	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <hr/> <hr/> <hr/>

Work Order ID 100119

April-18-13 9:27:16 AM

100119

Page 2

Item ID: 646.3715

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Strut Doubler

Stop

NS2

Start Date: 4/18/13 Start Qty: 12.00 *12*

Cust Item ID:

Required Date: 4/25/13 Req'd Qty: 12.00 *12*

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC	QC8- Inspect parts - second check	0.00 AS 21 30						9	
Quality Control	Memo	0.00 134.19							

140 Outsource process-Anodize per QSI017 4.1.10.1 0.00

140

Outsource4

Outsource process - Anodize

Memo

Issue P/O: 19436

HARD ANODIZE, COLOR BLACK AS PER DWG.(SEE NOTE 2)

013-04-19

150 Receive & Inspect for Damage & Mat'l Certs 0.00

150

Packaging

Packaging

Memo

0.00

13/04/13 (3)

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Date: ..

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other			
Part No. _____ NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending	Bend	Grain	Ovalized	Pressure/Forced							
Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance	Temperature/Cure							
Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect	Weld							
Crushed/Crimped.	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled							
Cuffs	Contamination	Maintenance	Part Moved								
Heat Treat	Countersink	Mislabeled	Positioned Wrong								
Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge								
Ripples in Bend	Drill Holes	Offset	Other								
Torque Waves in Extrusion	Drawing	Out of Calibration									
Turning Sequence	Finish	Out of Sequence									
Wave/Twist in Tube	Folio	Outside Dimensions									

Work Order ID 100119

April-18-13 9:27:16 AM

100119

Page 3

Item ID: 646.3715

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Strut Doubler

Stop

NS2

Start Date: 4/18/13 Start Qty: 12.00

12

Cust Item ID:

Required Date: 4/25/13 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:		Stop	*NR2*
160							

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00	8AS 821 888	BS 13		9			

170

170

SprayPaint

Spray Painting

Memo

0.00

PRIME IAW MIL-P-23377J TYPE1 CLASS N AS PER DWG. (SEE NOTE 2)

CARDINAL 4860-50 PRIMER BATCH: 125452

9 5/1/13
13-05-23

180

180

QC

Quality Control

QC14- Inspect Spray Paint

0.00

Memo

0.00

6/13/13/24

(X9)

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS																																																																										
			Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Machining <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/>	Quality <input type="checkbox"/>	Other <input type="checkbox"/>																																																												
Part No. _____			Work Order Update <input type="checkbox"/>																																																																													
NCR No. _____																																																																																
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description			Sign & Date	Verification		QC Inspector																																																																			
Doc/Data																																																																																
Equip/Tooling																																																																																
Operator																																																																																
Material																																																																																
Setup																																																																																
Other																																																																																
Process																																																																																
Supplier																																																																																
Training																																																																																
Unapproved																																																																																
FAULT CATEGORY																																																																																
Landing Gear				<table border="0"> <tr> <td colspan="3">General</td> <td colspan="8"></td> </tr> <tr> <td>Bending</td> <td><input type="checkbox"/> Bend</td> <td><input type="checkbox"/> Grain</td> <td><input type="checkbox"/> Ovalized</td> <td><input type="checkbox"/> Pressure/Forced</td> </tr> <tr> <td>Centre Not Concentric to O/S</td> <td><input type="checkbox"/> BOM/Route</td> <td><input type="checkbox"/> Hardware</td> <td><input type="checkbox"/> Over/Under tolerance</td> <td><input type="checkbox"/> Temperature/Cure</td> </tr> <tr> <td>Cracks</td> <td><input type="checkbox"/> Broken/Damaged</td> <td><input type="checkbox"/> Inspection Incomplete</td> <td><input type="checkbox"/> Part Incorrect</td> <td><input type="checkbox"/> Weld</td> </tr> <tr> <td>Crushed/Crimped.</td> <td><input type="checkbox"/> Burrs</td> <td><input type="checkbox"/> Instructions Incomplete/Unclear</td> <td><input type="checkbox"/> Part Lost/Missing</td> <td><input type="checkbox"/> Wrong Stock Pulled</td> </tr> <tr> <td>Cuffs</td> <td><input type="checkbox"/> Contamination</td> <td><input type="checkbox"/> Maintenance</td> <td><input type="checkbox"/> Part Moved</td> <td></td> </tr> <tr> <td>Heat Treat</td> <td><input type="checkbox"/> Countersink</td> <td><input type="checkbox"/> Mislabeled</td> <td><input type="checkbox"/> Positioned Wrong</td> <td></td> </tr> <tr> <td>Inspection Strip in Tube</td> <td><input type="checkbox"/> Cut Too Short</td> <td><input type="checkbox"/> Misread</td> <td><input type="checkbox"/> Power Loss/Surge</td> <td><input type="checkbox"/> Other</td> </tr> <tr> <td>Ripples in Bend</td> <td><input type="checkbox"/> Drill Holes</td> <td><input type="checkbox"/> Offset</td> <td></td> <td></td> </tr> <tr> <td>Torque Waves in Extrusion</td> <td><input type="checkbox"/> Drawing</td> <td><input type="checkbox"/> Out of Calibration</td> <td></td> <td></td> </tr> <tr> <td>Turning Sequence</td> <td><input type="checkbox"/> Finish</td> <td><input type="checkbox"/> Out of Sequence</td> <td></td> <td></td> </tr> <tr> <td>Wave/Twist in Tube</td> <td><input type="checkbox"/> Folio</td> <td><input type="checkbox"/> Outside Dimensions</td> <td></td> <td></td> </tr> </table>											General											Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced	Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure	Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld	Crushed/Crimped.	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled	Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved		Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong		Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Other	Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset			Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration			Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence			Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions		
				General																																																																												
				Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced																																																																								
				Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure																																																																								
				Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld																																																																								
				Crushed/Crimped.	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled																																																																								
				Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved																																																																									
				Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong																																																																									
				Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Other																																																																								
				Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset																																																																										
				Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration																																																																										
				Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence																																																																										
				Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions																																																																										

Work Order ID 100119

April-18-13 9:27:16 AM

100119

Page 4

Item ID: 646.3715

Accepted

N900040100

Setup Start

NS1

Revision ID:

Item Name: Strut Doubler

Start Date: 4/18/13

Start Qty: 12.00

12

Cust Item ID:

Customer:

Required Date: 4/25/13

Req'd Qty: 12.00

12

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
 QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 *190* Packaging	Identify as per dwg & Stock Location: <i>S003b</i>	0.00							<i>13/07/27</i>
Packaging	Memo	0.00							
	IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV								
200 *200* QC	QC21- Final Inspection - Work Order Release	0.00							<i>13/07/27</i>
Quality Control	Memo	0.00							

13/5/21

AB 05/22

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Date:

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier				Engineering Quality Other	
Part No. _____							Prod. Eng. Coor.	Rec/Store/Packaging	Supplier		
NCR No. _____											
Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data	<input type="checkbox"/>										
Equip/Tooling	<input type="checkbox"/>										
Operator	<input type="checkbox"/>										
Material	<input type="checkbox"/>										
Setup	<input type="checkbox"/>										
Other	<input type="checkbox"/>										
Process	<input type="checkbox"/>										
Supplier	<input type="checkbox"/>										
Training	<input type="checkbox"/>										
Unapproved	<input type="checkbox"/>										
FAULT CATEGORY											
Landing Gear				General							
Bending	<input type="checkbox"/>	Bend	<input type="checkbox"/>	Grain	<input type="checkbox"/>	Ovalized	<input type="checkbox"/>	Pressure/Forced			
Centre Not Concentric to O/S	<input type="checkbox"/>	BOM/Route	<input type="checkbox"/>	Hardware	<input type="checkbox"/>	Over/Under tolerance	<input type="checkbox"/>	Temperature/Cure			
Cracks	<input type="checkbox"/>	Broken/Damaged	<input type="checkbox"/>	Inspection Incomplete	<input type="checkbox"/>	Part Incorrect	<input type="checkbox"/>	Weld			
Crushed/Crimped.	<input type="checkbox"/>	Burrs	<input type="checkbox"/>	Instructions Incomplete/Unclear	<input type="checkbox"/>	Part Lost/Missing	<input type="checkbox"/>	Wrong Stock Pulled			
Cuffs	<input type="checkbox"/>	Contamination	<input type="checkbox"/>	Maintenance	<input type="checkbox"/>	Part Moved	<input type="checkbox"/>				
Heat Treat	<input type="checkbox"/>	Countersink	<input type="checkbox"/>	Mislabeled	<input type="checkbox"/>	Positioned Wrong	<input type="checkbox"/>				
Inspection Strip in Tube	<input type="checkbox"/>	Cut Too Short	<input type="checkbox"/>	Misread	<input type="checkbox"/>	Power Loss/Surge	<input type="checkbox"/>				
Ripples in Bend	<input type="checkbox"/>	Drill Holes	<input type="checkbox"/>	Offset	<input type="checkbox"/>		<input type="checkbox"/>				
Torque Waves in Extrusion	<input type="checkbox"/>	Drawing	<input type="checkbox"/>	Out of Calibration	<input type="checkbox"/>		<input type="checkbox"/>				
Turning Sequence	<input type="checkbox"/>	Finish	<input type="checkbox"/>	Out of Sequence	<input type="checkbox"/>		<input type="checkbox"/>				
Wave/Twist in Tube	<input type="checkbox"/>	Folio	<input type="checkbox"/>	Outside Dimensions	<input type="checkbox"/>		<input type="checkbox"/>				

Picklist Print

April-18-13 9:27:20 AM

Page 1

Work Order ID: 100119

100119

Parent Item: 646.3715

646 3715

Parent Item Name: Strut Doubler

Start Date: 4/18/13

Required Date: 4/25/13

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP REV:A 12.10.22 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.040		Purchased	No			110	sf	675.0356	0.0434	0.548211	**	0.6	JM3-4-19

M6061T6S 040

6061-T6 .040 Sheet

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT021	675.0356	
121099	273.7156	
123874	401.32	123874

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled

DART AEROSPACE LTD	Work Order:	100119
Description: Strut Doubler	Part Number:	646.3715
Inspection Dwg: 646.3700 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

23

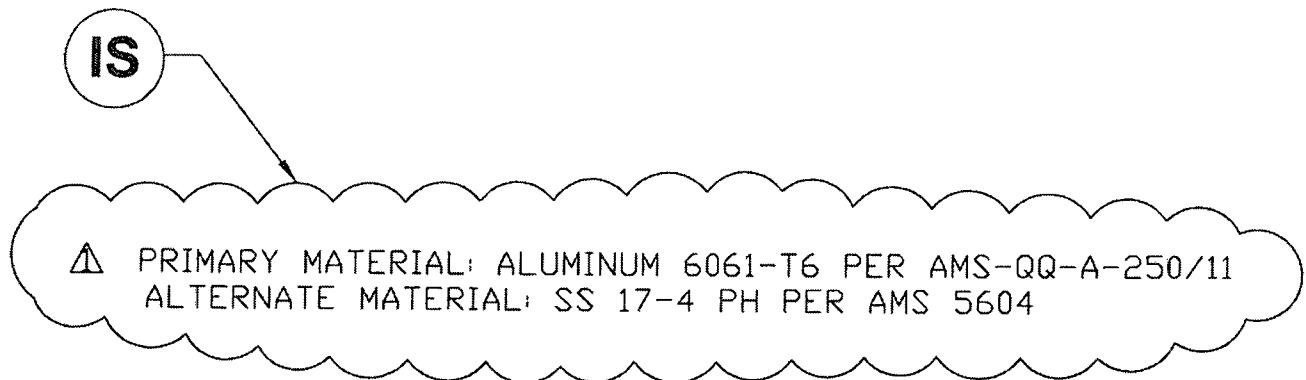
四

Measured by:	JR	Audited by:	BB	Preliminary Approval:	
Date:	13-4-19	Date:	13-4-19	Date:	

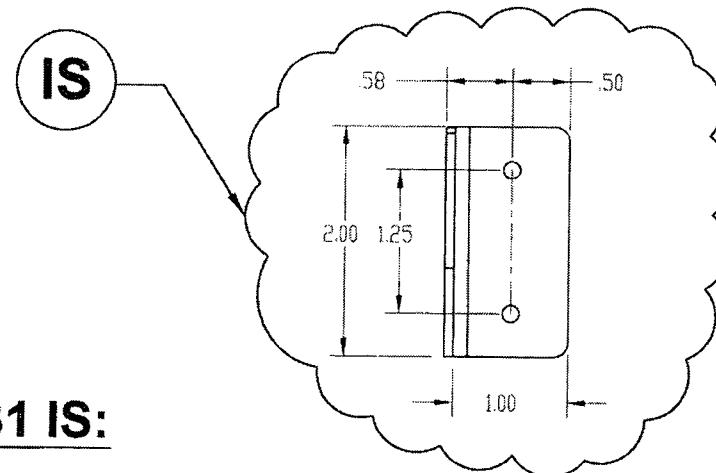
Rev	Date	Change	Revised by	Approved
A	13.03.04	New Issue	KJ	

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 03702				SHEET 1 OF 2	
	DWG NO. 646.3700	REV: A	PREPARED BY B. PETERS	DATE: 11/15/12	EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.	
DWG TITLE: SHEETMETAL						
APPROVED BY:	ENGR: <i>[Signature]</i>	MFG: <i>Daron Barber</i>	QC: <i>[Signature]</i>	EFF: NEXT ORDER		
TRANSACTION CODES (TC) A-ADD C-CREATE R-REVISE D-DELETE	REASON: ADDED ALTERNATE MATERIAL AND REVISED REFERENCE DIMENSIONS				EOR:	D-12-010

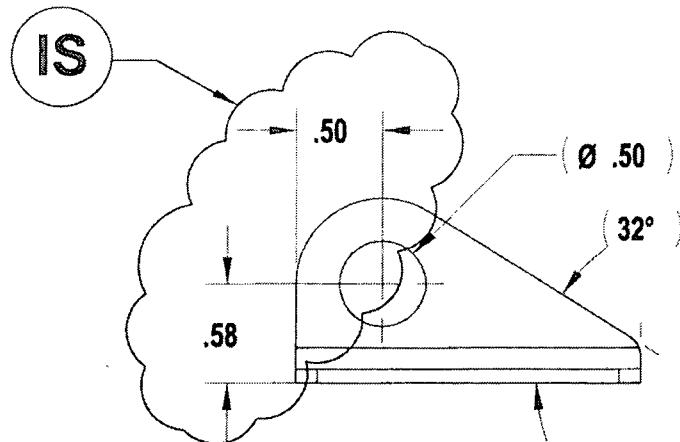
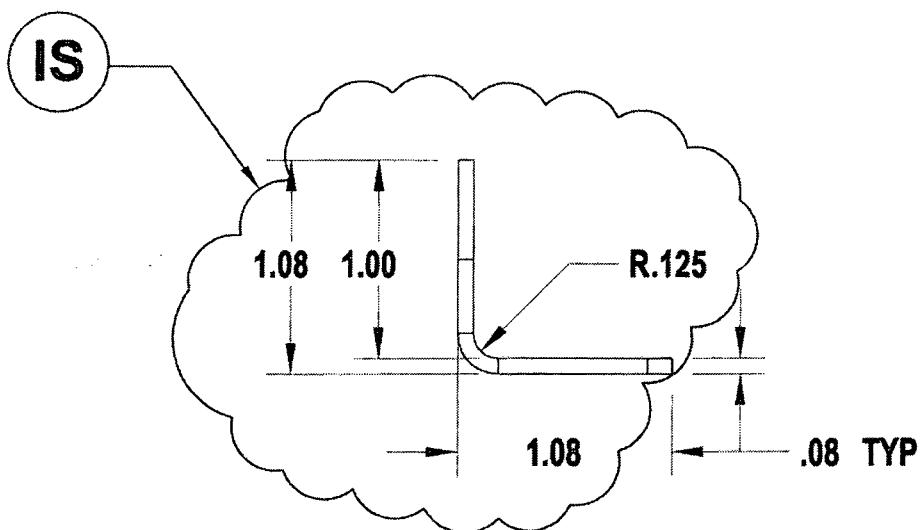
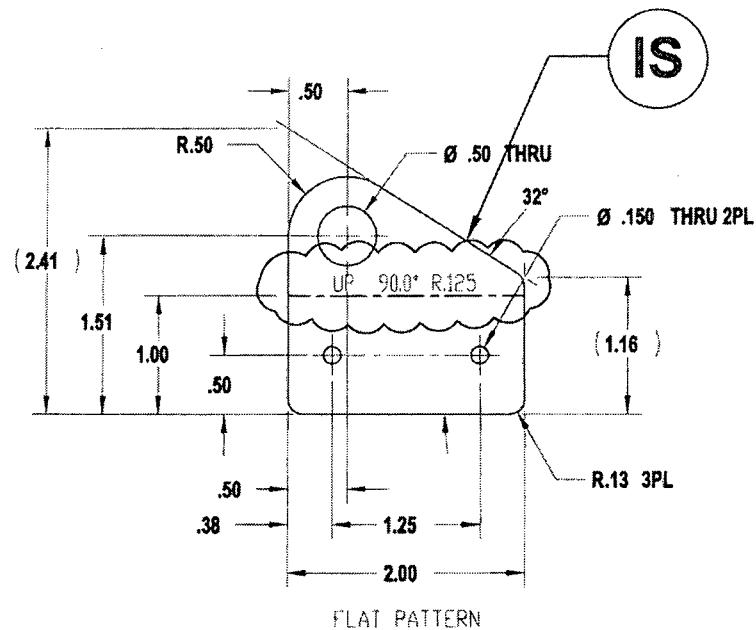
SHEET 1, ZONE A2 IS:



SHEET 7, ZONE B1 IS:



F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:				<input type="checkbox"/> RFMS <input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUC <input type="checkbox"/> ICA <input type="checkbox"/> BOM	CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	DER REVIEW REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

**SHEET 7, ZONE C4 IS:****SHEET 7, ZONE D1 IS:****SHEET 7, ZONE B7 IS:**

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION
-----	----	-------------	-----	-------------	------------------------

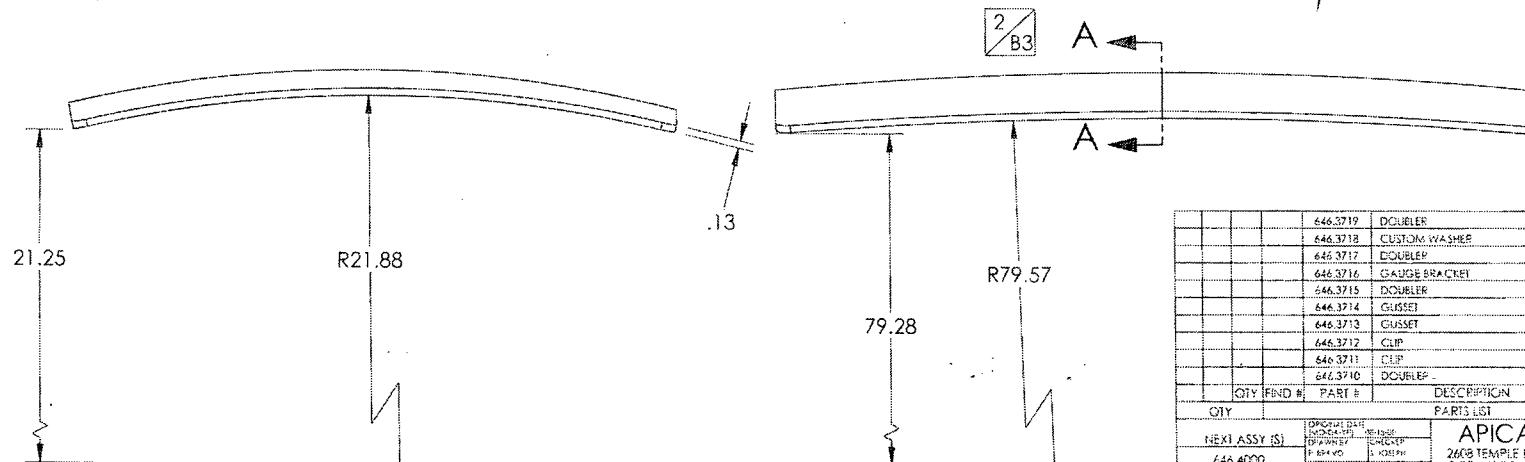
100119

REF ID:

1 MATERIAL: ALUMINUM 6061-T6 PER AMS-QQ-A-250/11
2 FINISH: HARD ANODIZE IAW MIL-A-3625 TYPE III,
 CLASS 2, COLOR BLACK.
 CARDINAL 4840-50 PRETREATMENT PRIMER
 PRIME IAW MIL-P-2337J TYPE I CLASS N
3 MATERIAL: 17-4 PH AMS 5604, CONDITION H900
4 FINISH: PRIME IAW MIL-P-2337J TYPE I CLASS N
 5. DEBURR AND BREAK ALL SHARP EDGES
 6. IDENTIFY IAW MPP-120

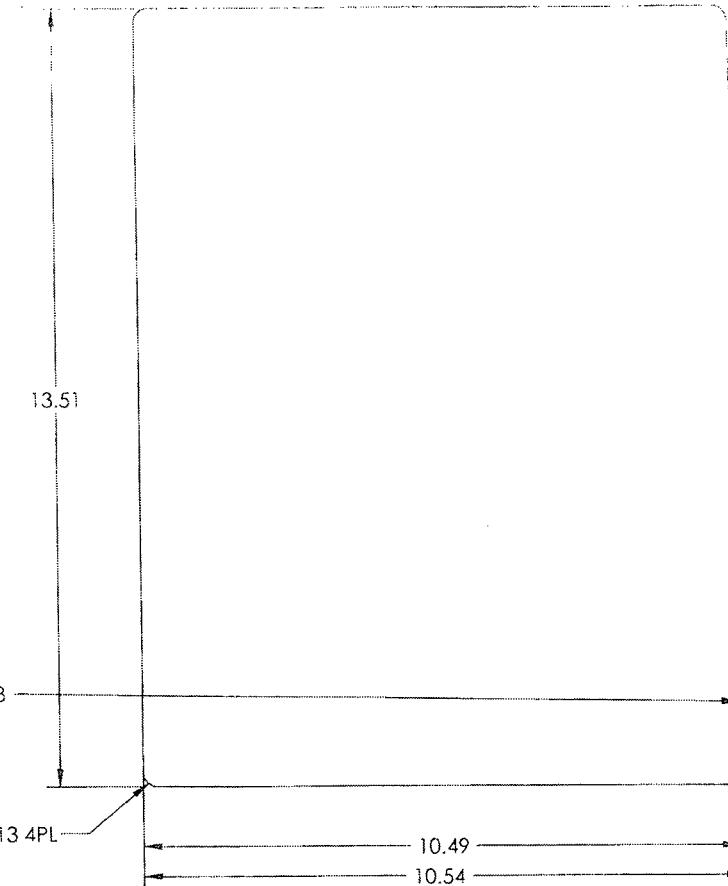
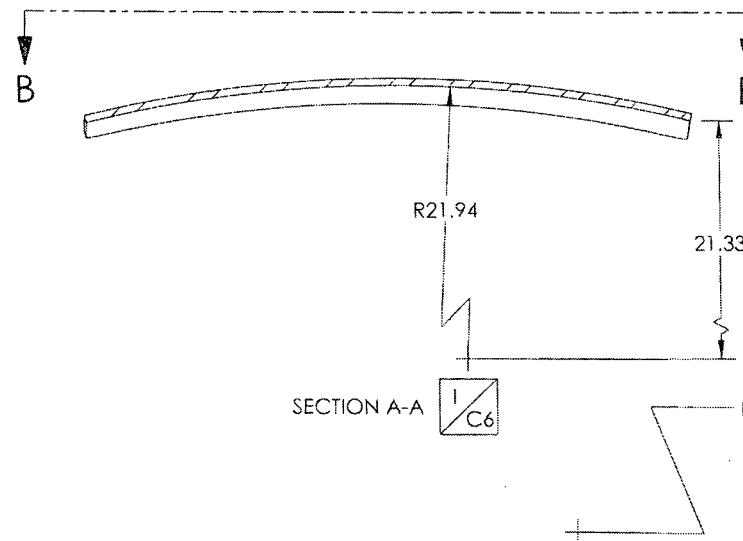
646.3710

UNINCORPORATED ECN(s)

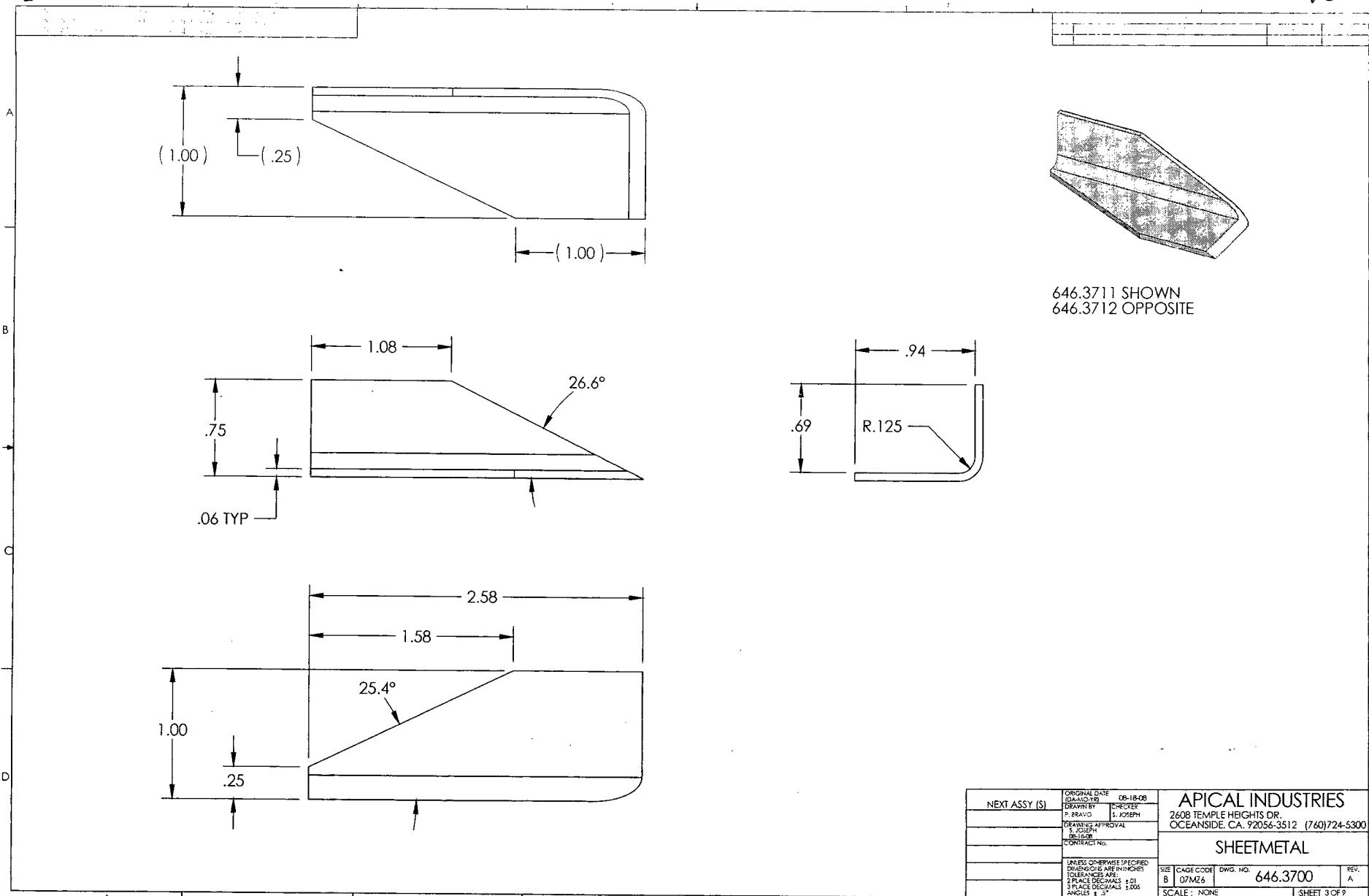
03702

CITY	FIND #	PART #	DESCRIPTION	MATL	SPEC.
PARTS LIST					
NEXI ASSY (S)	646.4000	646.3719	DOUBLER		
		646.3718	CUSTOM WASHER		
		646.3717	DOUBLER		
		646.3716	GAUGE BRACKET		
		646.3715	DOUBLER		
		646.3714	GISET		
		646.3713	GISET		
		646.3712	CLIP		
		646.3711	CLIP		
		646.3710	DOUBLER		
APICAL INDUSTRIES					
2603 TEMPLE HEIGHTS DR, OCEANSIDE, CA 92056-3512 (760)724-5300					
SHEETMETAL					
SPC	SCALE CS24	PRINT NO.			
B	074126	646.3700	A		
		SCALE NONE	SHEET	FOR S	

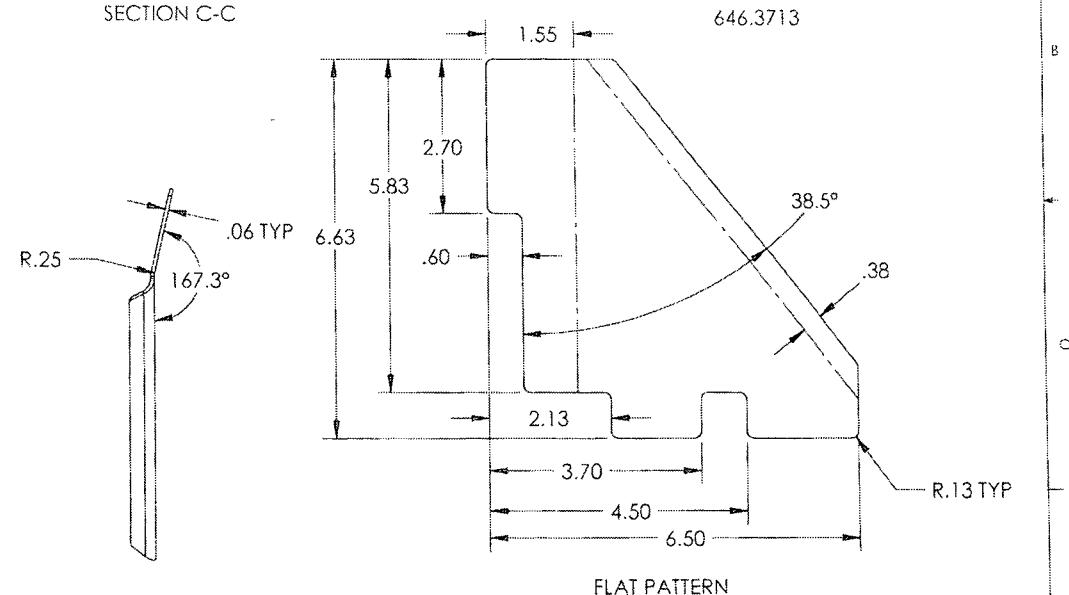
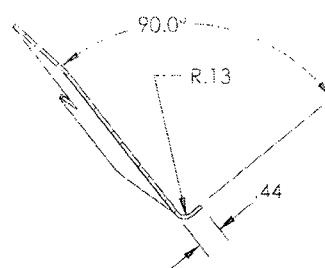
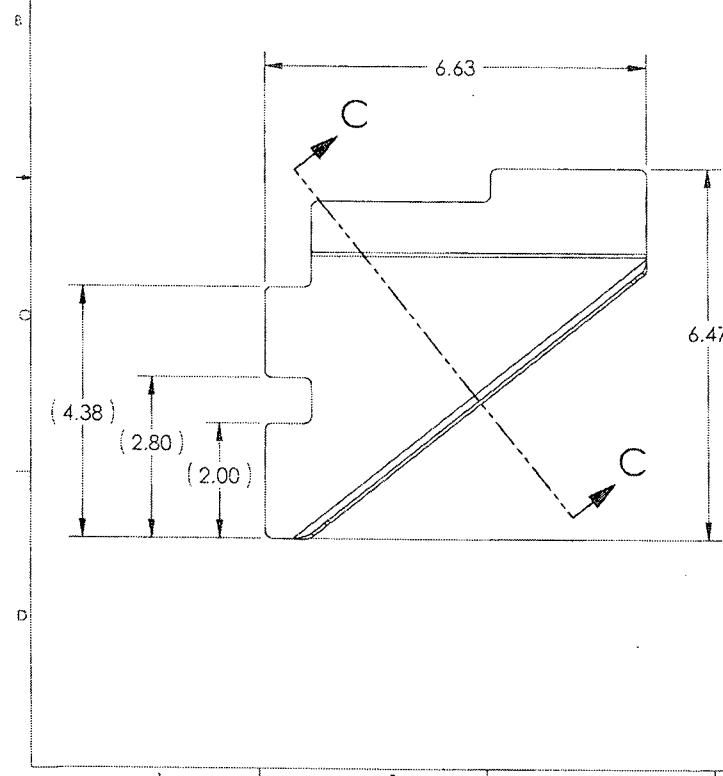
100119



08/04/04	08/04/04	APICAL INDUSTRIES
08/04/04	08/04/04	2608 TEMPLE HEIGHTS DR, OCEANSIDE, CA 92056-3612 (760)724-5300
08/04/04	08/04/04	SHEETMETAL
08/04/04	08/04/04	UNLESS OTHERWISE SPECIFIED THICKNESS IS IN INCHES
08/04/04	08/04/04	2 PLACE DECIMALS 2D 3 PLACE DECIMALS 3D 4 PLACE DECIMALS 4D ACTIONS & S
08/04/04	08/04/04	REV A 646.3700 SCALE NONE SHEET 2 OF 9

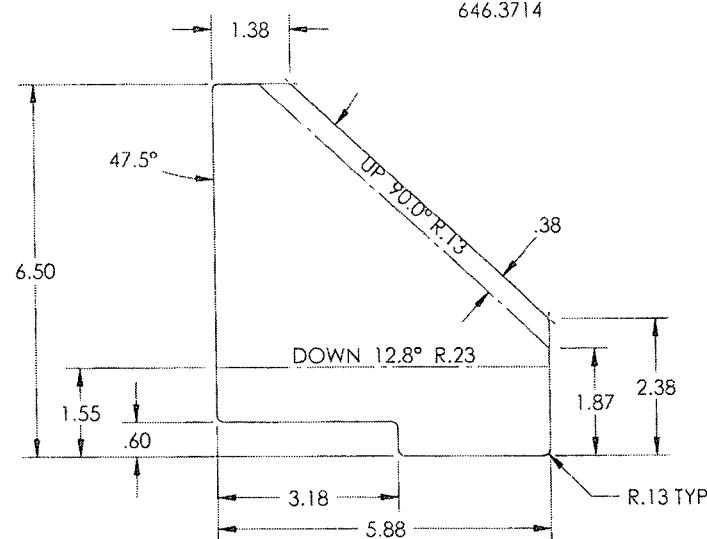
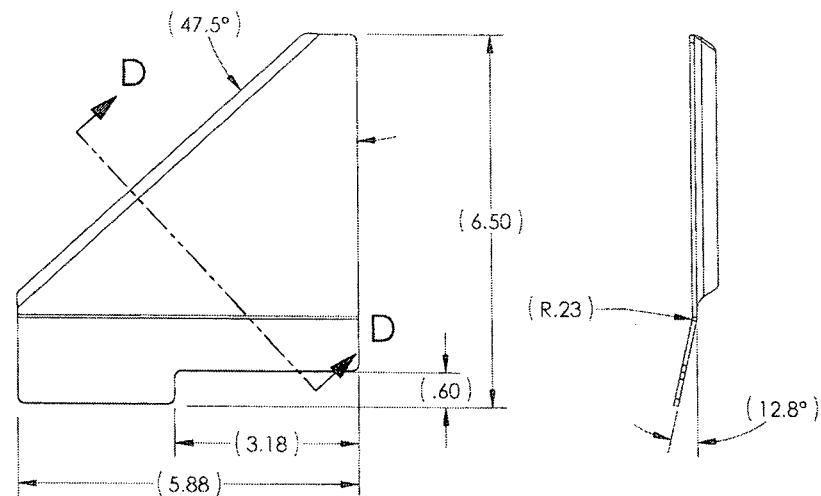
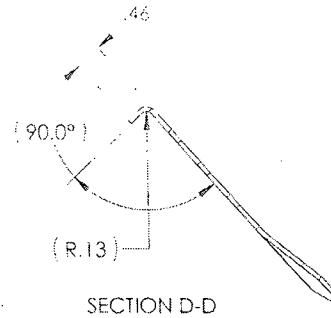


100119



NEXT ASSY (\$)	SPACER BODY (10-1250)	APICAL INDUSTRIES
	DRAWN BY: J. JONES	2608 TEMPLE HEIGHTS DR.
	REVISED BY: J. JONES	OCEANSIDE CA. 92056-3512 (760)724-5303
	DATE DRAWN: 1-10-87	
	DATE REVISED: 1-10-87	
		SHEETMETAL
		REV: CAGE CODE: DRAFT NO: 646.3700
	B 07M61	SCALE: 1:25 SHEET 1 OF 9

100119

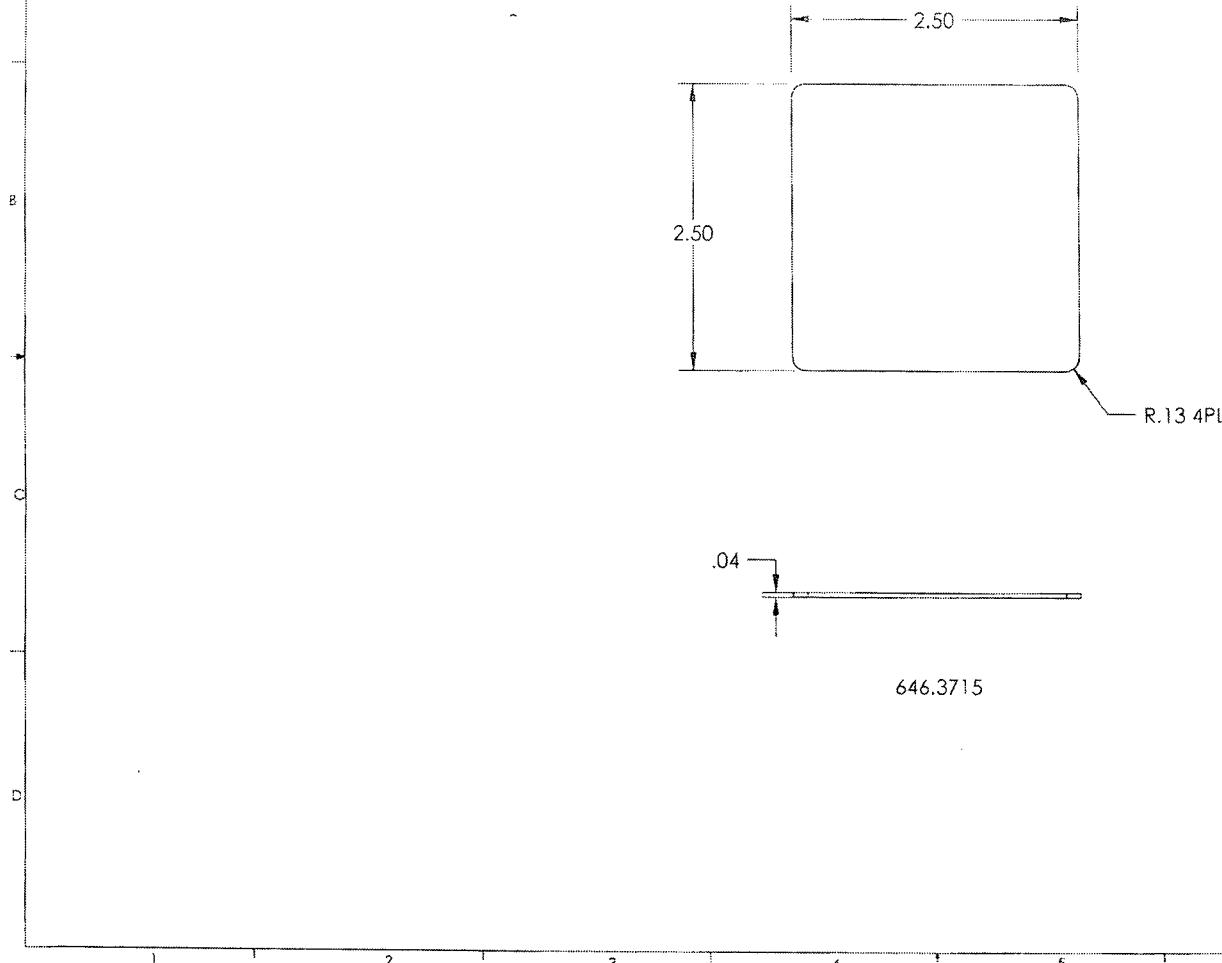


FLAT PATTERN

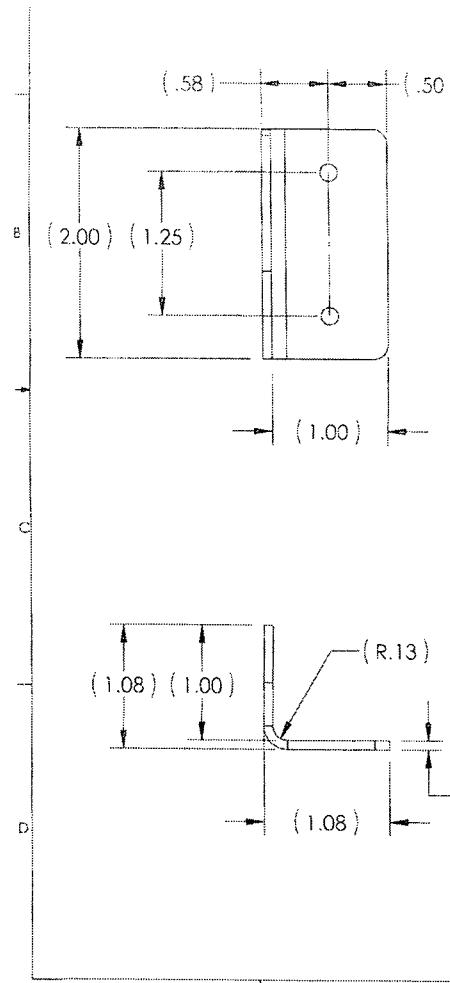
APICAL INDUSTRIES 2600 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92054-3512 (760)724-5300
SHEETMETAL
WALLS OTHERWISE SHOWN AS PLATE OR SHEET TOP SURFACES ARE PLATE SURFACE ± 1/8 IN ANGLES ± 2°

DATE	REVISION	DOC NO.	REV.
8/7/16	1	646.3700	B
SCALE: NONE		SHEET 5 OF 9	

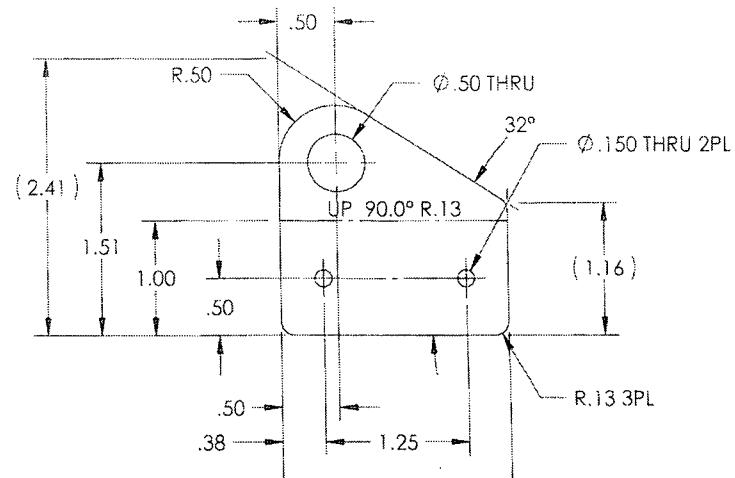
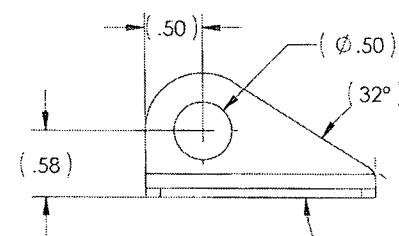
100119



NEXT ASSY (S)	ORIGINAL DATE 10-10-03	APICAL INDUSTRIES
	RELEASER M. BAXD	2608 TEMPLE HEIGHTS DR.
	DATE ISSUED 3-2004	OCEANSIDE, CA. 92056-3512 (760)724-5300
	DRAWING APPROVAL S. JONES	
	S. JONES CONTRACTING	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE .010-.015 UNLESS SPECIFIED OTHERWISE 1 PLACE DECIMALS EXCEPT ANGLES & %	E	SCALE: NONE
	DATE CODE 0405 NO 646.3700	8V A
	B 07M16	
	C	
	D	
	E	
	F	
	G	
	H	
	I	
	J	
	K	
	L	
	M	
	N	
	O	
	P	
	Q	
	R	
	S	
	T	
	U	
	V	
	W	
	X	
	Y	
	Z	



646.3716

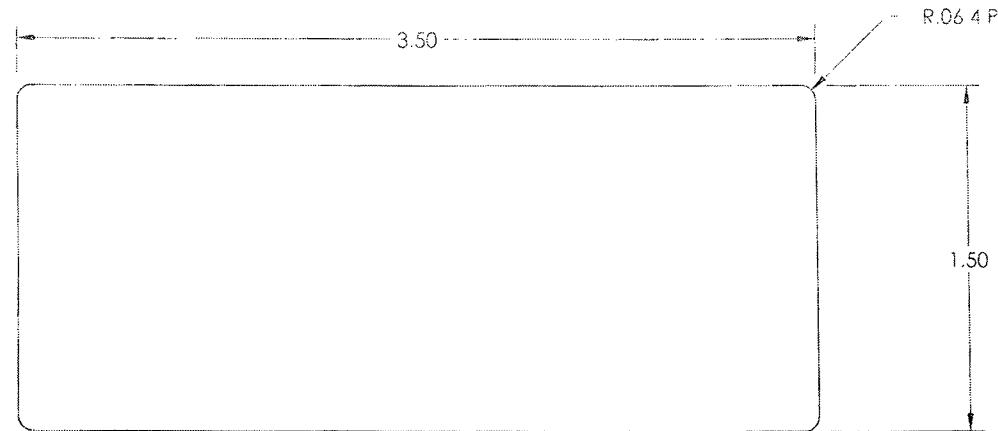


FLAT PATTERN

NEXT ASSY (S)	CD 19 CQ
DRAWN BY	J. JOSEPH
DESIGNED BY	S. JOSEPH
CHIEF ENGINEER	
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES. DECIMALS ARE PLACED DECREASING FROM ANGLES ± 3°	
REVISIONS	REV NO
B 07MAY	646.3700
SCALE: 1:100	46
	1 SHEET OF C

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 760/724-5330
SHEETMETAL

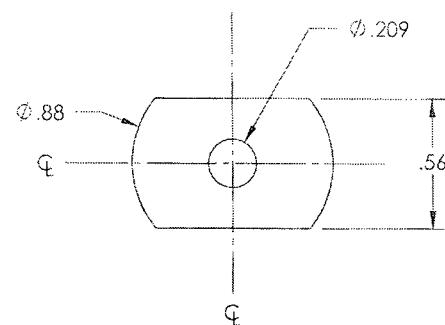
100119



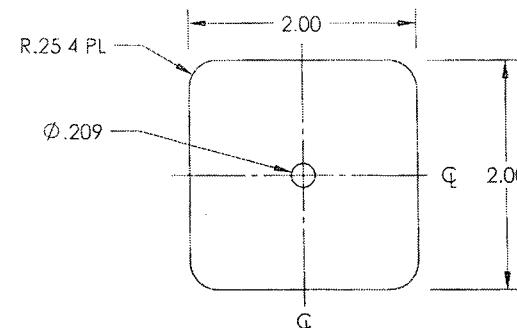
646.3717

NEXT ASSY (S)	DESIGNER ID# 100-119	DRAFTER ID# 100-119	CHEKED ID# 100-119	APICAL INDUSTRIES
				2426 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300
				SHEETMETAL
				REV. E
				DATE 6/26/00
				BY DRAFTS
				646.3700
				SCALE, INCHES
				SHEET B GL?

100119



646.3718



646.3719

NEXT ASSY [S]		REVISION DATE	08/05	APICAL INDUSTRIES	
		DESIGNER	J. GIBSON	2439 TEMPLE HEIGHTS DR,	
		PRINCIPAL	J. GIBSON	OCEANSIDE, CA. 92056-3512 (760)724-5300	
		DRAWING APPROVAL			
		S. JONES			
		C. JONES			
		CONTRACT NO.			
		UNLESS OTHERWISE SPECIFIED			
		TOLERANCES ARE			
		STRAIGHTNESS ± .005			
		ANGLE DEGREES ± 5°			
DATE	EX-0004	DRAW. NO.	646.3700	REV.	
B	07/14/05				
SCALE: 10:1 SHEET 2 OF 4					



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 62363

Date: 06-May-13

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

h: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

erms

Ship Via

Quantity	Description	Rev:
1 lot	Part: ASST 11 PCS 646.9710 3 PCS 647.1915 19 PCS 646.3715 9 20 PCS 647.1713 HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 2 PCS D4410-041 BLACK ANODIZE MIL-A-8625 TYPE II CLASS 2 Job: 20130267	PO: 19638
Line:		
Certificate of Conformance		
A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.		
ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY		
DATE: <u>6/5/13</u>		
CERTIFIED SIGNATURE: <u>M</u>		
RECEIVER SIGNATURE: _____		